

Claims

We claim

- 1 1. An apparatus for selecting broadcast signals, the apparatus comprising:
 - 2 a tuner for receiving a plurality of broadcast signals from a plurality
 - 3 of broadcast sources;
 - 4 a memory, the memory including:
 - 5 a current location of the receiver;
 - 6 a database of broadcast sources for a plurality of broadcast
 - 7 locations;
 - 8 a set of listener preferences; and
 - 9 a processor coupled to the tuner and the memory for selecting a
 - 10 group of broadcast signals based on a predetermined
 - 11 selection criteria.
- 1 2. The apparatus of claim 1, wherein the predetermined selection criteria
- 2 includes the plurality of receivable broadcast signals, the current location of the
- 3 receiver, and the set of listener preferences.
- 1 3. The apparatus of claim 2, wherein the database of broadcast sources
- 2 further includes program formats for a plurality of broadcast locations.
- 1 4. The apparatus of claim 1, wherein the current location of the receiver is
- 2 entered by the listener.
- 1 5. The apparatus of claim 4, wherein the current location entered by the
- 2 listener is a zip code.
- 1 6. The apparatus of claim 4, wherein the current location entered by the
- 2 listener is a city code.

1 7. The apparatus of claim 4, wherein the current location entered by the
2 listener is a city name.

1 8. The apparatus of claim 4, wherein the current location entered by the
2 listener is entered via a keypad integral to the apparatus.

1 9. The apparatus of claim 4, wherein the current location entered by the
2 listener is entered via voice input.

1 10. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a global positioning system (GPS) receiver integral to the apparatus.

1 11. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a global positioning system (GPS) receiver external to the apparatus.

1 12. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a cellular phone integral to the apparatus.

1 13. The apparatus of claim 1, wherein the current location of the receiver is
2 provided by a cellular phone external to the apparatus.

1 14. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a removable memory module.

1 15. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a CD-ROM disc.

1 16. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a CD-RW disc.

1 17. The apparatus of claim 1, wherein the database of broadcast services is
2 provided to the receiver by a writable DVD.

1 18. The apparatus of claim 1, wherein the apparatus further includes an I/O
2 port for transferring information from an external device to the apparatus.

1 19. The apparatus of claim 18, wherein the external device is coupled to the
2 I/O port via a wired connection.

1 20. The apparatus of claim 18, wherein the external device is coupled to the
2 I/O port via a wireless connection.

1 21. The apparatus of claim 20, wherein the wireless connection is an RF
2 connection.

1 22. The apparatus of claim 20, wherein the wireless connection is an IR
2 connection.

1 23. The apparatus of claim 20, wherein the external device is a personal
2 digital assistant (PDA).

1 24. The apparatus of claim 20, wherein the external device is a personal
2 computer (PC).

1 25. The apparatus of claim 20, wherein the external device is a wireless
2 phone.

- 1 26. The apparatus of claim 20, wherein the transferred information includes
- 2 the current location of the receiver.

- 1 27. The apparatus of claim 20, wherein the transferred information is passed
- 2 between two or more external devices prior to being passed to the I/O port of the
- 3 apparatus.

- 1 28. The apparatus of claim 20, wherein the transferred information includes
- 2 the database of broadcast sources and program formats.

- 1 29. The apparatus of claim 20, wherein the transferred information includes
- 2 the set of user preferences.

- 1 30. The apparatus of claim 29, wherein the set of user preferences includes
- 2 favorite program formats.

- 1 31. The apparatus of claim 29, wherein the set of user preferences includes
- 2 specific program choices.

- 1 32. The apparatus of claim 1, wherein the database of broadcast sources
- 2 comprises a plurality of broadcast source entries, each of the plurality of
- 3 broadcast source entries comprising: a station identifier, a station format, and a
- 4 station location.

- 1 33. The apparatus of claim 1, wherein the receiver is mounted within a mobile
- 2 vehicle.

- 1 34. The apparatus of claim 1, wherein the receiver is a hand-held device.

1 35. A method for selecting broadcast signals on a receiver, the method
2 comprising:
3 creating a set of user preferences;
4 loading the set of user preferences and a database of broadcast
5 sources into the receiver;
6 determining a location of the receiver;
7 receiving a plurality of broadcast channels from a plurality of
8 broadcast services;
9 searching the database of broadcast sources and program formats
10 based on the location of the receiver;
11 creating one or more groups of broadcast channels identified by the
12 search based on the set of user preferences; and
13 presenting the one or more groups of broadcast channels to the
14 user.

1 36. The method for selecting broadcast signals of claim 35, wherein the step
2 of determining the location of the receiver further includes:
3 receiving a global positioning service (GPS) signal; and
4 interpreting the GPS signal.

1 37. The method for selecting broadcast signals of claim 35, wherein the step
2 of determining the location of the receiver further includes:
3 receiving a location signal via a cellular phone; and
4 interpreting the location signal.

1 38. The method for selecting broadcast signals of claim 35, wherein the step
2 of determining the location of the receiver further includes:
3 receiving a location identifier code entered by a user; and
4 interpreting location identifier code.

1 39. The method for selecting broadcast signals of claim 35, wherein the step
2 of searching a database of broadcast sources and program formats based on the
3 location of the receiver further includes:

4 extracting a station location from each of a plurality of broadcast
5 source entries residing within the database of broadcast sources and
6 program formats;

7 comparing the station location with the location of the receiver to
8 determine if the receiver is within receiving range of the broadcast
9 source; and

10 building a list of receivable broadcast source records for all of the
11 broadcast sources that are within receiving range.

1 40. The method for selecting broadcast signals of claim 35, wherein the
2 predetermined grouping criteria includes program format.

1 41. The method for selecting broadcast signals of claim 35, wherein the step
2 of presenting the one or more groups of broadcast channels to the user further
3 includes the step of:

4 assigning the one or more groups of broadcast channels to one or
5 more user selectable controls on the receiver.

1 42. A program product, comprising:

2 a program configured to determine the location of a receiver;

3 receive a plurality of broadcast channels from a plurality of broadcast

4 services; search a database of broadcast sources and program formats

5 based on the location of the receiver; create one or more groups of

6 broadcast channels identified by the search based on a predetermined

7 grouping criteria; and present the one or more groups of broadcast

8 channels to a user.

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